



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|--------------------------|---------------------|------------------|
| 09/904,779 | 07/13/2001 | Venkatraman Ramakrishnan | 256602000500 | 1824 |

25226 7590 01/21/2003
MORRISON & FOERSTER LLP
755 PAGE MILL RD
PALO ALTO, CA 94304-1018

| |
|----------|
| EXAMINER |
|----------|

LY, CHEYNE D

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1631

DATE MAILED: 01/21/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/904,779 | RAMAKRISHNAN ET AL. |
| Examiner | Art Unit | |
| Cheyne D Ly | 1631 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on ____.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-11 is/are pending in the application.

4a) Of the above claim(s) ____ is/are withdrawn from consideration.

5) Claim(s) ____ is/are allowed.

6) Claim(s) ____ is/are rejected.

7) Claim(s) ____ is/are objected to.

8) Claim(s) 1-11 are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on July 13, 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on ____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. ____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). ____.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) Other: ____

DETAILED ACTION

The art unit designated for this application has changed. Applicants(s) are hereby informed that future correspondence should be directed to Art Unit 1631.

1. It is acknowledged that Paper No. 6, filed February 12, 2002, indicates that certified copies were submitted with said paper but none of said certified copies have been found in the file. It is suggested that Applicant send certified copies of the priority documents in order for this instant application to be considered for priority benefits under 35 U.S.C. § 119.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-4, drawn to a crystal of a 30S ribosomal subunit, classified in class 436, subclass 4.
- II. Claims 5-8, drawn to a computer-based method that relies on the coordinate and structure data of the 30S ribosomal subunit for designing or selecting a potential drug or inhibitor of the 30S ribosome, classified in class 702, subclass 27. If this Group is elected, then the below summarized specie election is also required.
- III. Claim 9, drawn to a method that relies on the coordinate and structure data of the 30S ribosomal subunit for the determination of the structure of a bacterial 30S from a species other than *T. thermophilus*, classified in class 702, subclass 27.
- IV. Claims 10 and 11, drawn to a computer system containing coordinate and structure data of the 30S ribosomal subunit, intended to generate structures and/or perform rational drug design for the 30S ribosome or complexes and a computer

readable media containing data directed to the 30S ribosome or complexes, classified in class 702, subclass 27.

SPECIE ELECTION REQUIREMENT FOR GROUPS II:

2. This application contains claims directed to the following patentably distinct species of the claimed invention:

Species A: Drug or inhibitor design methods (i.e. de novo design).

Species B: Drug or inhibitor selection methods (i.e. screening of a database or library).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 6-8 of Group II are generic. These species are distinct due to the usages of each method. The method of species A could include the process of designing a drug or inhibitor de novo. The method of species B could include the process of selecting a drug or inhibitor by screening a database or a chemical library of existing drug or inhibitors.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after

the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. The inventions of Groups I-IV are distinct inventions because they are directed to different chemical types or methods of use regarding the critical limitations therein. For Group I, the critical feature is a crystal of a 30S ribosomal subunit. For Group II, the critical feature is a method that relies on the coordinate and structure data of the 30S ribosomal subunit for designing or selecting a potential drug or inhibitor of the 30S ribosome. For Group III, the critical feature is a method relying structure data for the determination of the structure of a bacterial 30S from a species other than *T. thermophilus*. For Group IV, the critical feature is the computer system and computer readable media containing coordinate and structure data of the 30S ribosomal subunit directed to generating structures and/or perform rational drug design for the 30S ribosome and complexes. It is acknowledged that the commonality of Groups II, III and IV is the coordinate and structure data of the 30S ribosomal subunit, however, the invention of each Group is distinct due to their specific usages of the coordinate and structure data of the 30S ribosomal subunit to achieve intended uses. Additionally, crystal structures, computer systems, and their methods of use have been most commonly, albeit not always, separately characterized

Art Unit: 1631

and published in the Biochemical literature, thus significantly adding to the search burden if examined together as compared to being search separately.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

7. Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (see 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 308-4242 or (703) 305-3014.

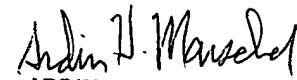
Art Unit: 1631

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Dune Ly, whose telephone number is (703) 308-3880. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (703) 308-4028.

10. Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instruments Examiner, Tina Plunkett, whose telephone number is (703) 305-3524 or to the Technical Center receptionist whose telephone number is (703) 308-0196.

C. Dune Ly
January 6, 2003.


ARDIN H. MARSCHEL
PRIMARY EXAMINER